CLAY WORKING MACHINERY

Catalogue No. 31

THE

TAPLIN-RICE-CLERKIN-CO

AKRON, OHIO. U.S.A.

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PIONEER CLAY WORKING MACHINERY

FOR THE MANUFACTURE OF

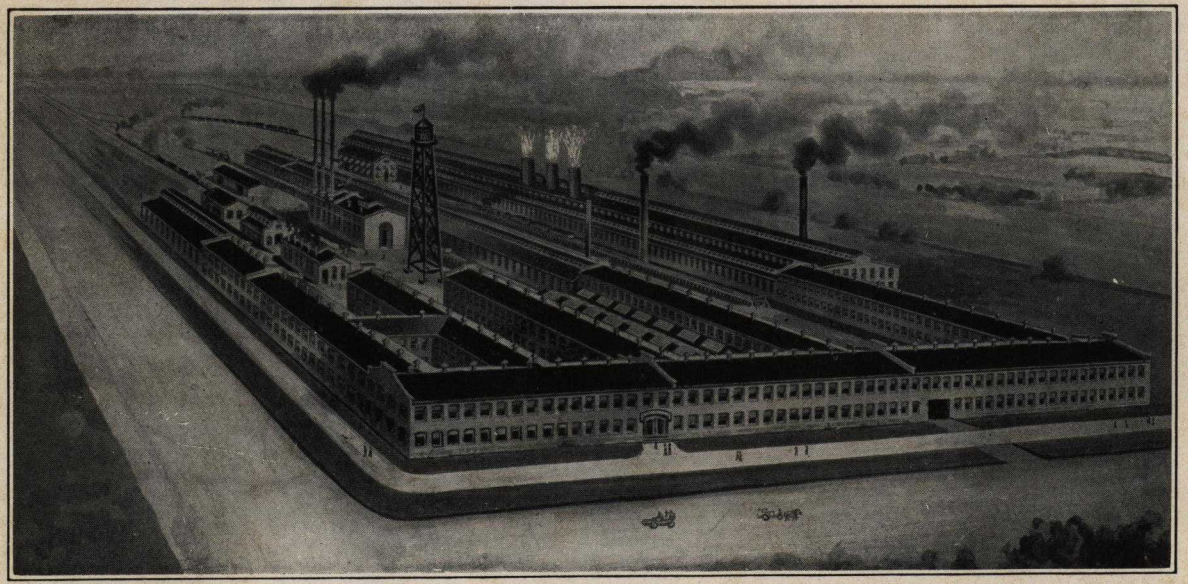
SEWER PIPE, DRAIN TILE, CONDUITS, STONEWARE, BRICK AND OTHER CLAY PRODUCTS

CATALOGUE NO. 31

1872—1922

ONE-HALF CENTURY EXPERIENCE MANUFACTURING CLAY WORKING MACHINERY

THE TAPLIN-RICE-CLERKIN CO.
AKRON, OHIO
U. S. A.



VIEW OF PRESENT PLANT FRONTING ON BROADWAY WITH THE ERIE, B. & O. AND PENNA. RAILROADS AT REAR

INTRODUCTION

We invite your attention to our line of Clay Working Machinery briefly described in the following pages.

Please note that we furnish COMPLETE Machinery equipment for the manufacture of Sewer Pipe, Fireproofing, Conduits, Building Blocks, Drain Tile, Stoneware and Pottery.

We furnish partial equipment for making all other clay products.

We are adding to our factory equipment new tools and other facilities for taking care of our increasing business.

We installed a fine power plant the past year, 350 H. P. Gas Engines, Generators and Motors, so that all the Machinery in our Factory is now electrically driven.

We have built a new, up-to-date foundry 80x360 feet, and are making various other improvements which will enable us to give you better service.

We believe you will get the most satisfactory and the best money-making equipment for your Clay Products Factory, by placing your orders with us.

Our ability to serve you comes of long and successful experience in the field, and close application to business.

Many of the largest and most successful Clay Products Factories in the United States and Canada, are equipped throughout with our Machinery.

We appreciate your past and present business, and solicit your future patronage.

We are, with respect,

Yours,

THE TAPLIN-RICE-CLERKIN CO.

Akron, Ohio, March, 1922.

PREPARATION OF CLAY

Several processes are used to prepare various clays for the diversified products into which they are manufactured.

We are prepared to furnish you the proper machines for doing this work no matter what the nature of your clay may be, or what clay product you propose to manufacture.

We recommend dry pans for shale, fire clay and in fact any clay that can be ground without clogging the screens, as by this process all pebbles, roots and other foreign substances are removed and only clean, finely ground clay is delivered at press or auger machine. The clay thus ground should be tempered, preferably in wet pans for sewer pipe, conduits, drain tile, flue linings and wall coping; it may, however, be successfully tempered in pug mill.

Plastic clay that will not go through dry pan may be ground and tempered for all the above mentioned products by our *Combination Mill* which performs the two-fold work of grinding and tempering the clay at one operation. Plastic clays and soft shales are prepared by our *Combined Disintegrator and Crushing Rolls* ready for tempering in pug mill.

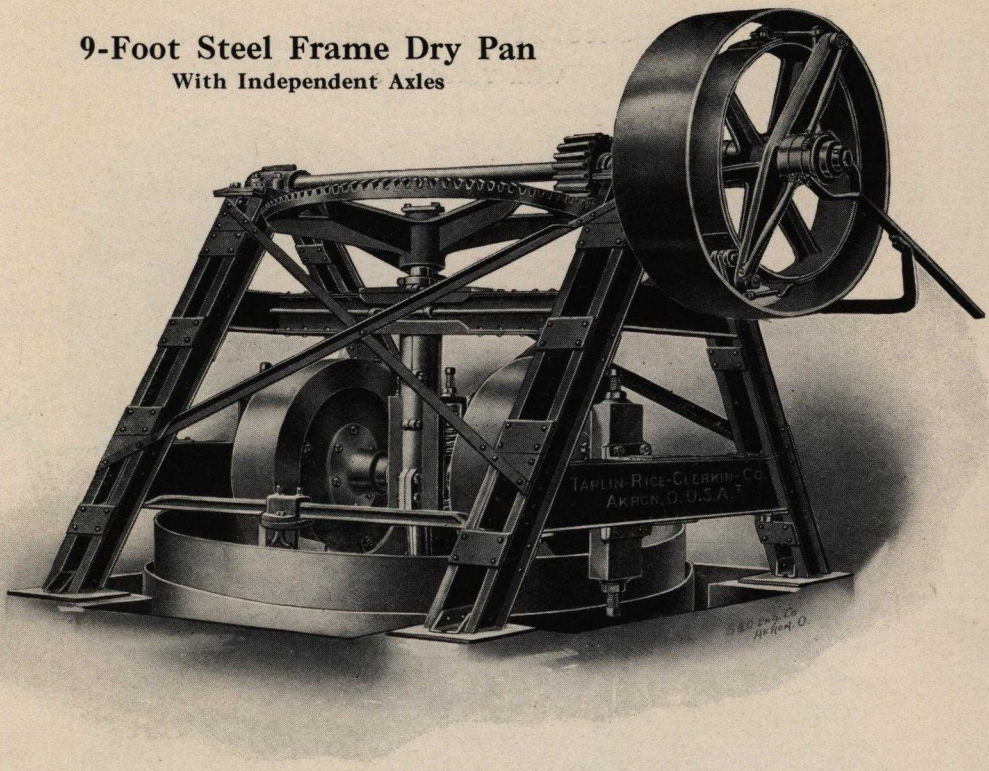
Clay for stoneware and pottery is generally prepared by the wash clay process, usually ground in dry pan or chaser mill, but often not ground at all. For this mode of preparing clay, use either Combination Mill, Dry Pan or Chaser mill when grinding is required—and for the further preparation—Blunger Mill, Clay Shaking screen, Filter press and Potters Pug Mill all shown and described under Pottery Machinery.

We have the machines you want and need for the

PREPARATION OF CLAY

9-Foot Steel Frame Dry Pan

With Independent Axles



Mode of Operation

The crushing wheels (Mullers) are supported and held in place about an eighth of an inch above the grinding plate by their axles, which are supported at each end by heavy compression springs above and below guide blocks mounted on ends of axles.

The clay being delivered into revolving pan is thrown toward the center, where it is subjected to the crushing action of the heavy mullers.

The clay thus ground to a powder, falls through the screen plates, while the unground portion encounters the scrapers, which again throw it under the wheels—this operation being kept up while new clay is being put into the pan continuously.

As the ground clay falls through the dry pan screens it is delivered to dry clay elevator by means of scrapers bolted to under side of pan.

A gravity setting is preferred by some manufacturers and may be used with any of our dry pans.

The ground clay is thus elevated to a proper height and passed over a piano wire screen.

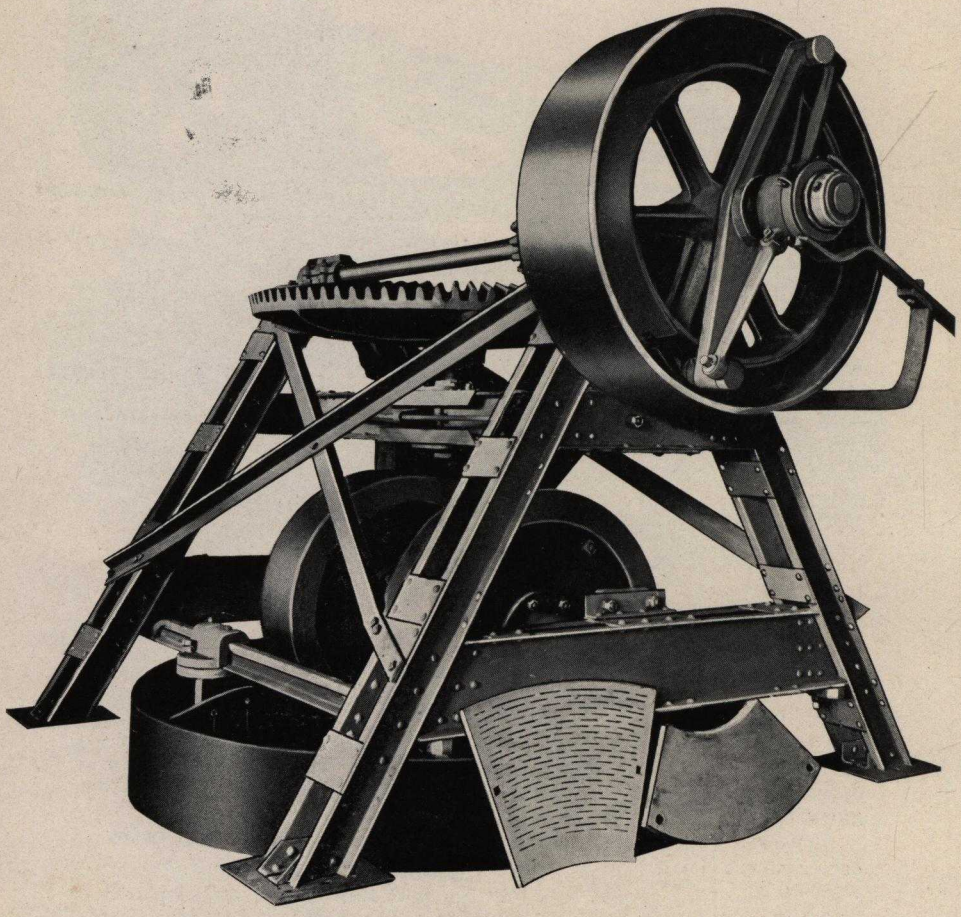
All that is fine enough to go through this screen is delivered to storage bins, which should be mounted directly above wet pans.

The tailings are spouted to dry pan, to be reground.

This pan is provided with Independent Axles.

Steel Frame Dry Pan

With Yoked Axle



9-Foot Steel Frame Dry Pan

The 9-foot Dry Pan shown herewith is our latest design with steel construction frame. This cut is made from a photograph of the machine and shows all but the lower part. The steel frame has some advantages over the cast iron frame, as it has the elasticity of the wood frame combined with the strength of an iron frame. It is lighter to ship, and gives more light around the mill and admits of clay being thrown in on three sides, that is, two sides and one end; the space around the other end being occupied by the driving clutch pulley and dry clay elevator.

This pan is made with either independent or yoked axles. The one shown here is the yoked axle type, and is preferred by most manufacturers.

The dry pan shown on page 7 is practically the same well-built machine as this, the only difference being that independent axles are there used.

The pan is driven by our Patent Band Friction Clutch, having a pulley 54 inches in diameter, 16-inch face. While this clutch is designed for a 16-inch belt, and it will hold all that a 16-inch belt will pull, still the pan may be driven by a belt much narrower. We recommend, however, not less than a 14-inch driving belt. The gears are 2¾-inch pitch and 8-inch face, the crown gear having 82 teeth involute design, and the pinion 20 teeth to match.

All wearing parts of this machine are renewable. The tires and grinding plates are of chilled cast iron, the tires being from 8 to 12 inches wide, according to requirements.

The scrapers are held in proper position by means of adjustable scraper holders fastened on rigid scraper bars, which are bolted to the machine and act as braces to the already rigid frame.

The frame of a dry or wet pan is made for the sole purpose of holding the machine firmly intact—*any frame we make will do this perfectly.* This steel frame is hot riveted together and is guaranteed to hold the pan while in operation without noticeable or objectionable vibration. The mullers are held in place on axle by means of a specially designed collar which permits the wear to be taken up from time to time, and which is held in place by a bolt passing through the axle. The mullers are thus held in proper position on the grinding plates at all times, which prevents breaking of screens.

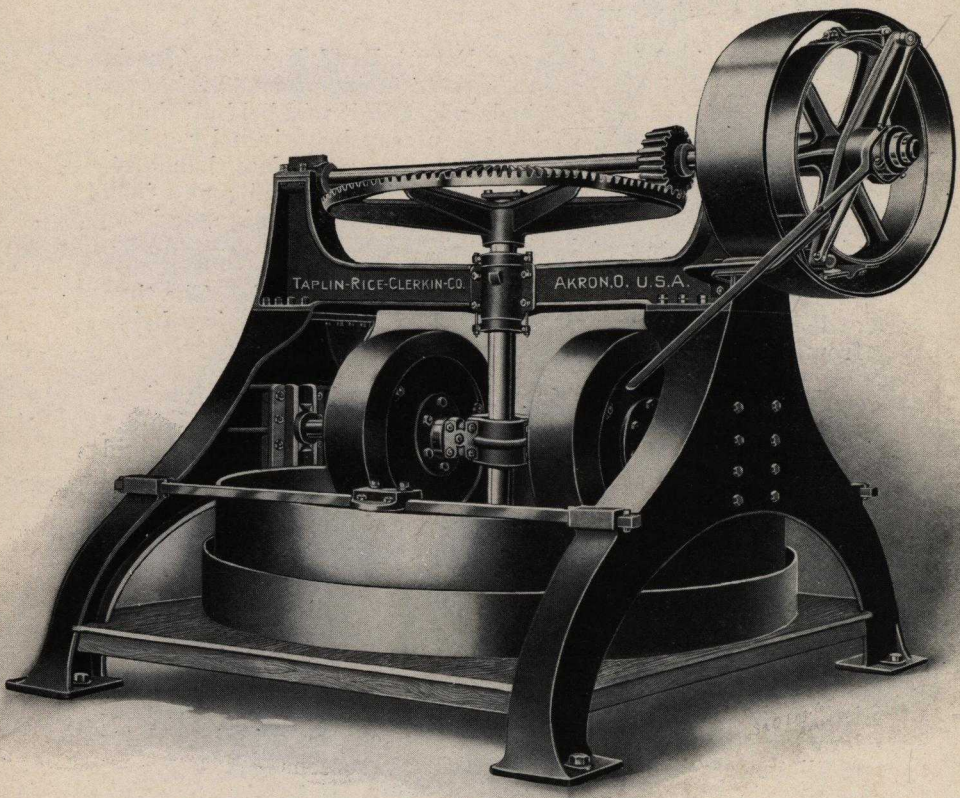
This is a first-class machine in every respect. The same pan with a cast-iron frame is shown on page 10. The following parts of this 9-foot dry pan are interchangeable with corresponding parts on all our 8-foot wet pans, and our other 9-foot dry pans: Band friction clutch, beveled gears, and step.

Our pans are equipped with perfect running steps, shown elsewhere.

Shipping weight of a 9-foot dry pan, 30,000 pounds.

Floor space, 10 feet by 12 feet 6 inches.

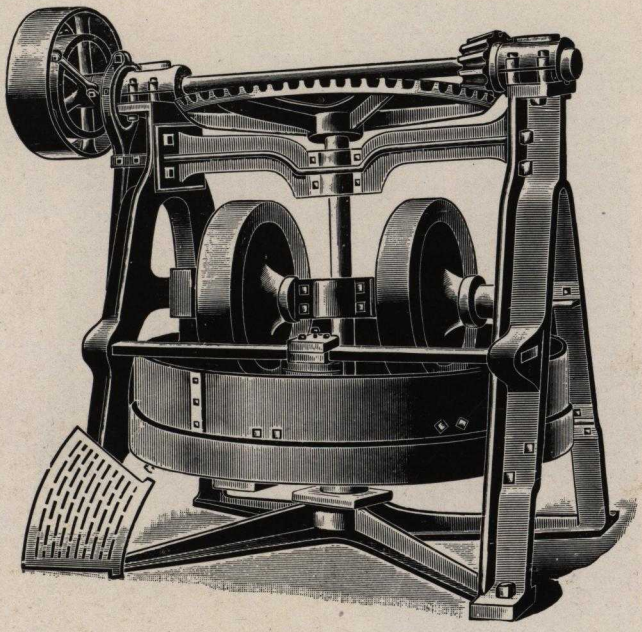
Power required, 35 H. P.—Speed of countershaft, 140 revolutions per minute.



9-Foot Dry Pan in Cast Iron Frame

For same machine in steel frame see page 8.

This dry pan, with the exception of cast iron frame, is exactly like our other pans described in preceding pages of this catalogue.



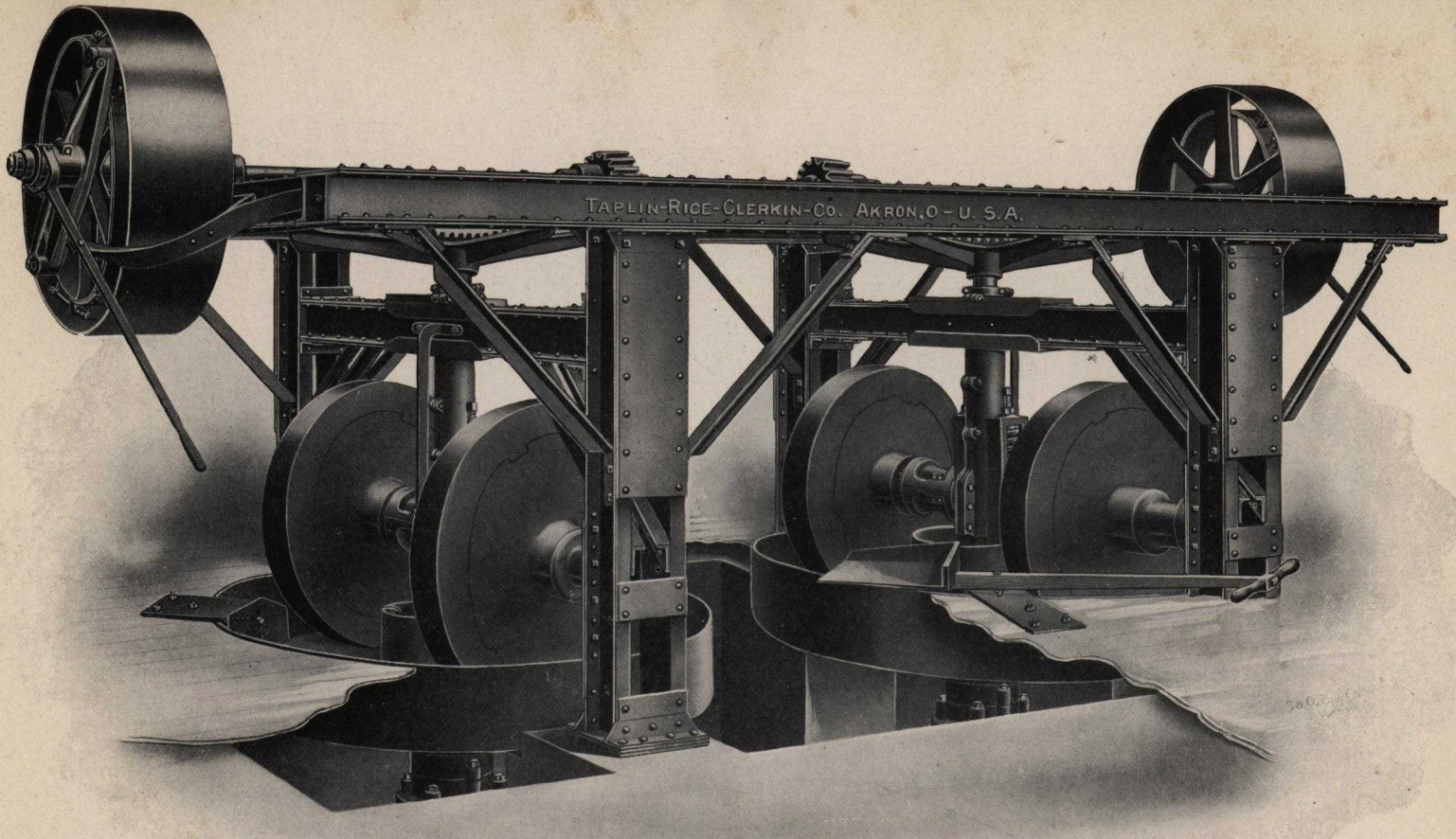
6-Foot Dry Pan

With Cast Iron Frame

The accompanying cut represents our self-contained, cast iron frame Dry Pan designed for a grog or tailing mill. It is built on the same strong and substantial lines as our other Dry Pans with wrought steel frames; it has hammered iron shaft, elevated screen plates, removable grinding plates, strong gearing and is equipped with friction clutch. It is recommended for grinding fire brick, sewer pipe, grog or any other refractory material that is to be used for mixing into clay having too close a body, and for a tailing mill.

In a small factory this pan can be utilized as a wet pan by removing the screen plates and using a solid plate.

This pan needs no foundation other than a level, fairly solid place to stand on.


TAPLIN-RICE-CLERKIN-CO. AKRON, O - U. S. A.

8-Foot Wet Pans in Duplex Steel Frame

The accompanying illustrated pans are designed for tempering clay for one press and are mounted in one frame for the purpose of being operated by one man.

The cut shows Independent Axles, but we recommend and usually furnish Yoked Axles, shown on page 12.

The frame which holds the pans also serves to help support a 200-ton bin of clay above, ground clay being drawn by gravity through two spouts, one leading to each pan.

These pans are driven by independent counter shafts by means of our friction clutch and gears previously described, thus either pan may be stopped without interfering with its companion.

These pans and frame are so constructed as to clear the wet clay elevator, which is directly in front of the man operating pans.

This arrangement is especially desirable where the line shaft runs parallel with the long side of this frame either in front or behind the temperer.

Pans mounted in separate steel "A" frames, same as shown on page 12, may be used in pairs, and will serve the purpose nicely where the line shaft does not run in the manner above described, but runs at right angles to it.

The wet clay elevator, in this instance, would be placed directly in front of the temperer and between the two "A's" at the rear end of the adjacent frames.

We have wet pans mounted in these duplex steel frames in successful operation in a large number of up-to-date factories. We also have furnished several factories with one 9-Foot Dry Pan and one 8-Foot Wet Pan mounted in this same duplex frame.

All parts of this wet pan are made of ample strength for work required of them, and the machine, aside from its frame, is built practically the same as the 8-foot duplex wet pan in cast iron frame. This steel frame is guaranteed to hold the pan while in operation without noticeable or objectionable vibration.

The clutches, gears and steps are interchangeable with those of our other dry and wet pans shown in this catalogue.

These pans are driven by our 54x16-inch Patent Band Friction Clutches.

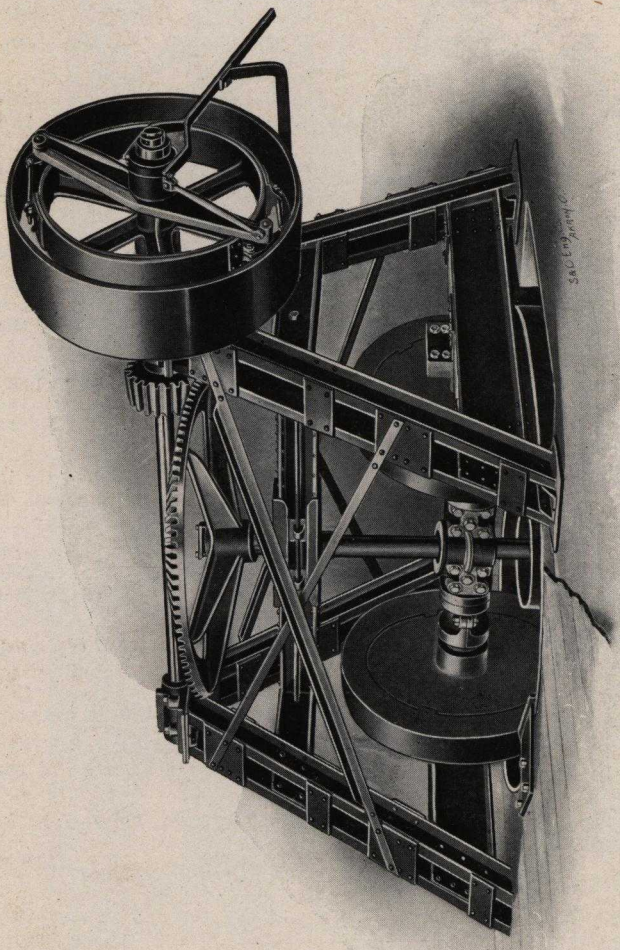
Shipping weight, 28 tons.

Floor space required, 26x11 feet.

The height is 6 feet 2 inches from top edge of rim of pan to center of driving clutch pulley.

Power required, about 25 H. P. for each pan. owing to nature of clay, a safe estimate being 70 H. P. for both machines under the most trying circumstances.

Speed of countershafts, 140 revolutions per minute.



8-Foot Steel Frame Wet Pan

8-Foot Steel Frame Wet Pan

Yoked Axle

Herewith is shown our 8-foot Wet Pan in single steel frame. This is a strong, well-built machine, the principal parts being interchangeable with the same parts in all our other pans.

The mullers are four feet six inches diam., 6-inch face, provided with removable chilled cast iron tires.

The bushings of mullers are 29 inches long, mounted on $3\frac{5}{16}$-inch diameter axles, being held in proper position by the same approved design of adjustable collar shown and described with dry pans.

This pan is emptied by plow shovel, shown on cut of 8-foot Duplex Wet Pan.

By means of this shape shovel, the clay is easily removed from the pans, as the operator merely holds the shovel in position, and it plows the clay out by the revolving motion of the pans.

This is a shovel of our own design, and is the only device on the market that will COMPLETELY EMPTY a wet pan with such ease, and in so short a time.

This wet pan can be used singly and, where clay is easily tempered, will prepare enough for one sewer pipe press. Several factories are successfully operated using one pan only for tempering ground clay, for one press.

These single frame wet pans may be set in pairs or in a row of any number, to prepare clay for a brick or pipe factory of any capacity.

This same substantial, quick-acting machine is shown in pairs mounted in duplex steel frame and in duplex cast iron frame.

The following parts of this pan are interchangeable with our 9-foot Dry Pan and our other 8-foot Wet Pans: Patent Band Friction Clutch, Crown Gear, Pinion, Countershaft, Flat-bottom Boxes, Guide Blocks, Guide Plates and Step.

The parts not interchangeable with our Dry Pan but interchangeable with our other Wet Pans are Yoke, Dust Collars, Scrapers, Axles, Curbs, Inside Curbs, Grinding Plates, Segments, Bed Plate and Upright Shaft.

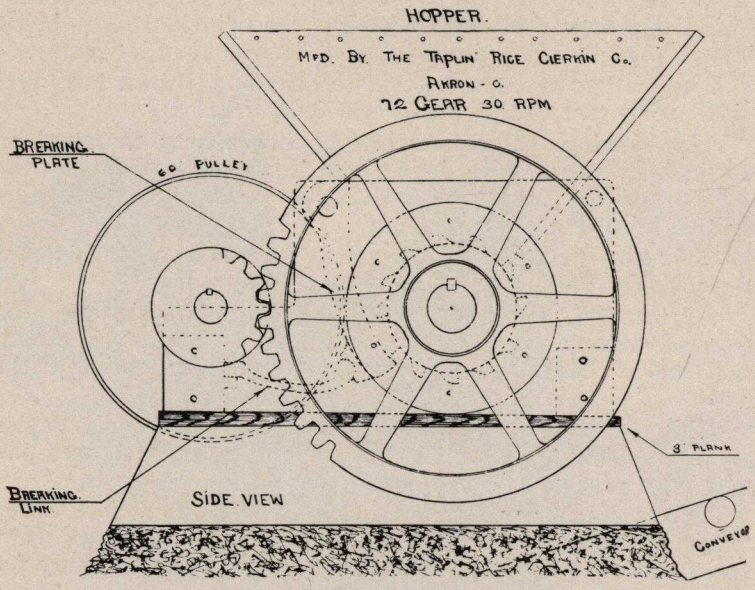
The Clutch Pulley for this pan is 54 x 16-inch, and should be run 140 R. P. M. Use 14 or 16-inch drive belt (16-inch preferred).

Power required, 35 H. P.

Extreme height above floor level, 9 feet.

Floor space required, 12 x 12 feet.

Shipping weight, 13½ tons.



Clay, Coal and Rock Crushers

Made in Four sizes with special advantages over all other makes now on the market.

(1) Made in removable roll sections.

(2) Removable heads.

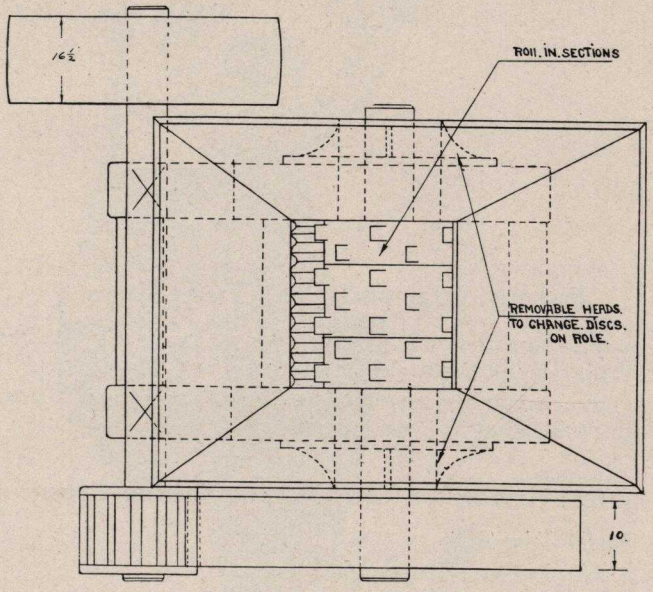
(3) Saving time in the replacing or changing position of sections.

(4) Can be made of all cast iron, semi-steel or steel, as may be required.

(5) Will prepare a shale clay and rock and do the work of from three to four dry pans.

(6) Saves labor, saves delay, saves annoyances, saves money and repairs.

Try one and our words for it, you will use nothing else.



TOP VIEW

Clay, Coal and Rock Crushers

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Try one and our words for it, you will use nothing else.

Patent Dry and Wet Pan Steps

You can depend upon any step we make, being the best of its type that money and skill can produce.

We have given the matter of *Steps Strenuous Attention,* with the result that we can furnish you

Perfect Running Steps of the Following Types:

Three Disc Step.

Patent Edgecomb Step.

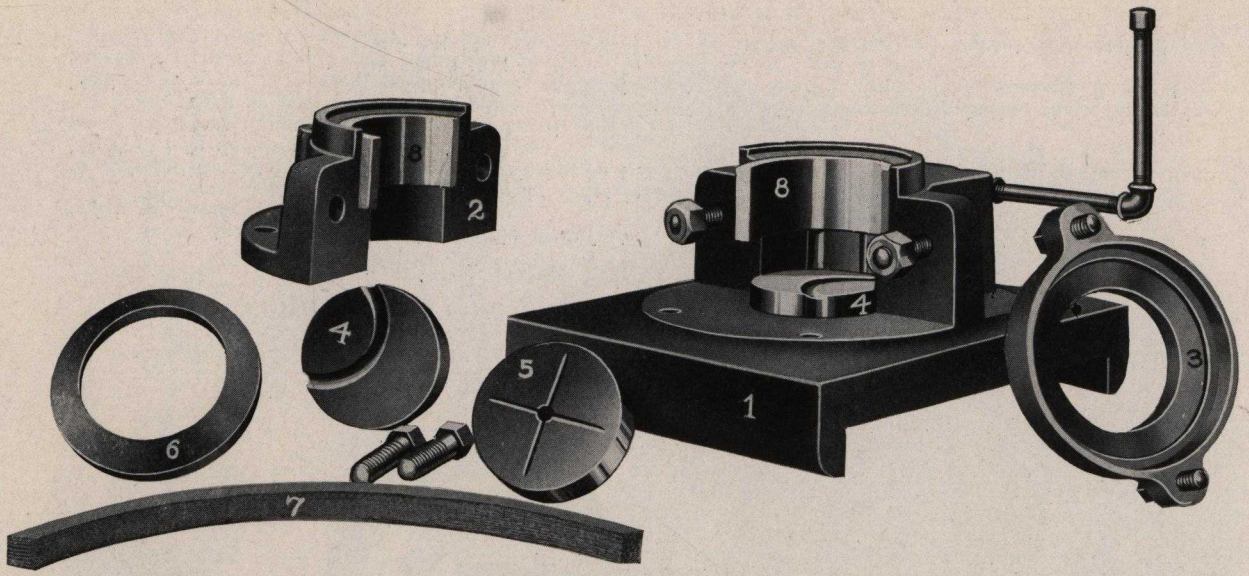
Patent Ball-Bearing Step.

These steps give entire satisfaction.

We will cheerfully refer you to a near-by manufacturer who is a satisfied user of some one of these steps.

The selection is to be governed according to requirements and choice of purchaser.

These steps are shown in detail and briefly described in the following pages.



Three Disc Step in Detail

1—Base. 2—Base Angle. 3—Packing Ring. 4—Steel Discs. 5—Bronze Wearing Disc. 6—Dust Collar. 7—Piece of Packing. 8—Brass Wearing Ring (in halves).

Please use these names when ordering repairs.

Our Three Disc Step Here Shown

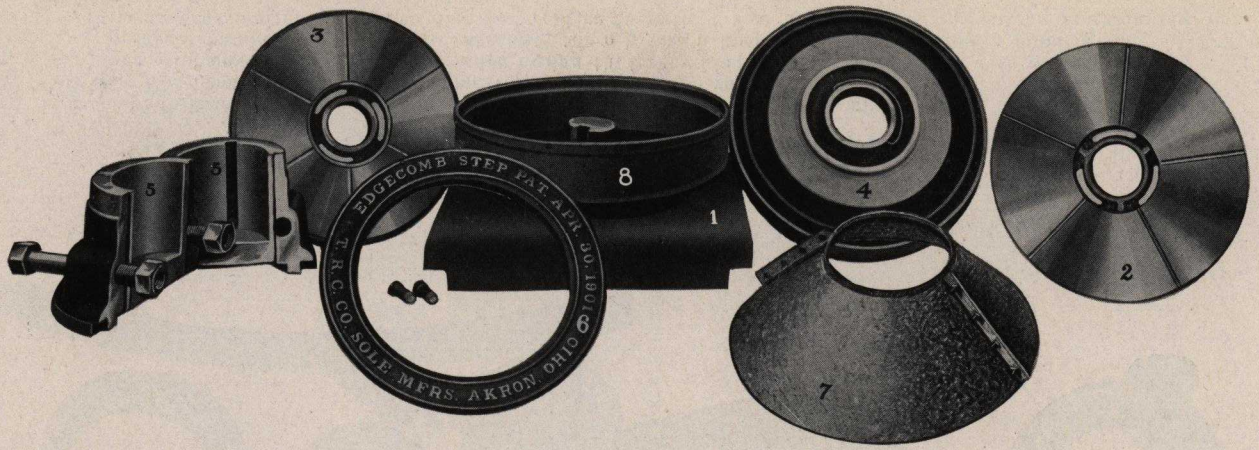
is a complete success. It has a hardened tool steel disc at top and bottom, and a bronze wearing disc to go between; this bronze disc is the only one that ever has to be renewed.

The oil grooves are ample and of such design that they keep the surface covered with oil at all times.

A large chamber is provided in cast base for oil, which keeps the discs constantly submerged.

It is an easy matter to remove disc and replace it with a new one. This is not only a fine running step, but is easily and cheaply kept in repair.

This step will give you good service and make you its friend.



Patent Edgecomb Step in Detail

1—Base. 2—Upper Wearing Plate. 3—Lower Wearing Plate (Babbitted). 4—Plug. 5—Coupling (in halves). 6—Dust Collar. 7—Dust Hood. 8—Casing.

Please use these names when ordering repairs.

Patent Edgecomb Step

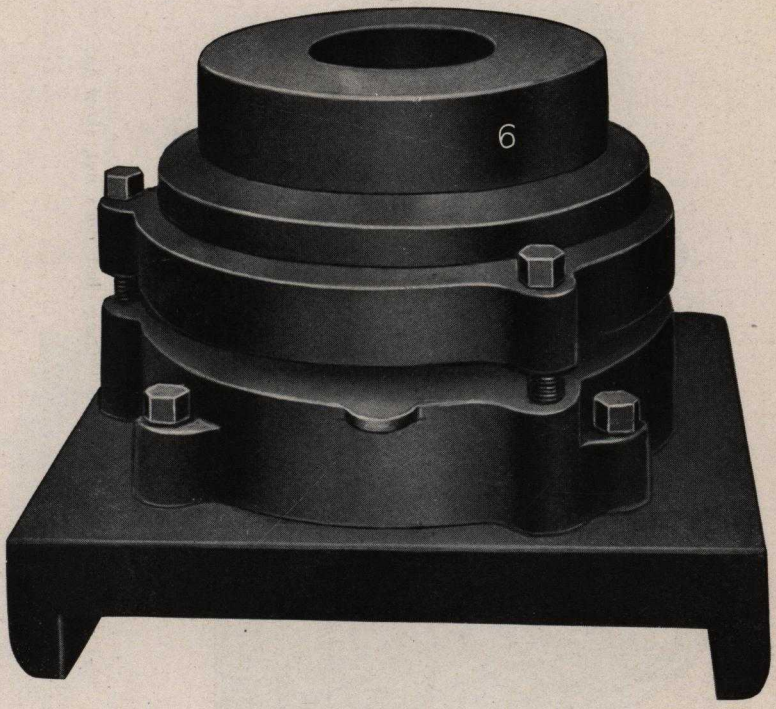
We control the patent and are sole manufacturers of the Edgecomb Patent Step, the details of which are here shown.

This is a machine in itself, ingenuously and scientifically constructed. The weight which it bears is so distributed that the pressure and the friction on the wearing plates are reduced to a minimum. The oiling device is unfailing.

The step is protected from dust and grit.

One manufacturer reports having used this step continuously in a dry pan, grinding shale for paving blocks, for over three years, without ever looking into it. He finally examined it, thinking it might be advisable to order repairs, and found that it showed no appreciable signs of wear.

If you want a positively reliable step for service, you will find it in our "Patent Edgecomb Step."



Patent Ball-Bearing Step

Ready to Receive Upright Shaft of Dry or Wet Pan

Our Patent Ball-Bearing Step here shown has sixty-one, one-inch hardened steel balls, distributed in four grooves, between two hardened steel plates.

The largest groove is about 9-inch diam, the smaller ones being concentric with and inside of the outer grooves, as shown.

These grooves contain 26, 19, 12 and 4 balls, respectively.

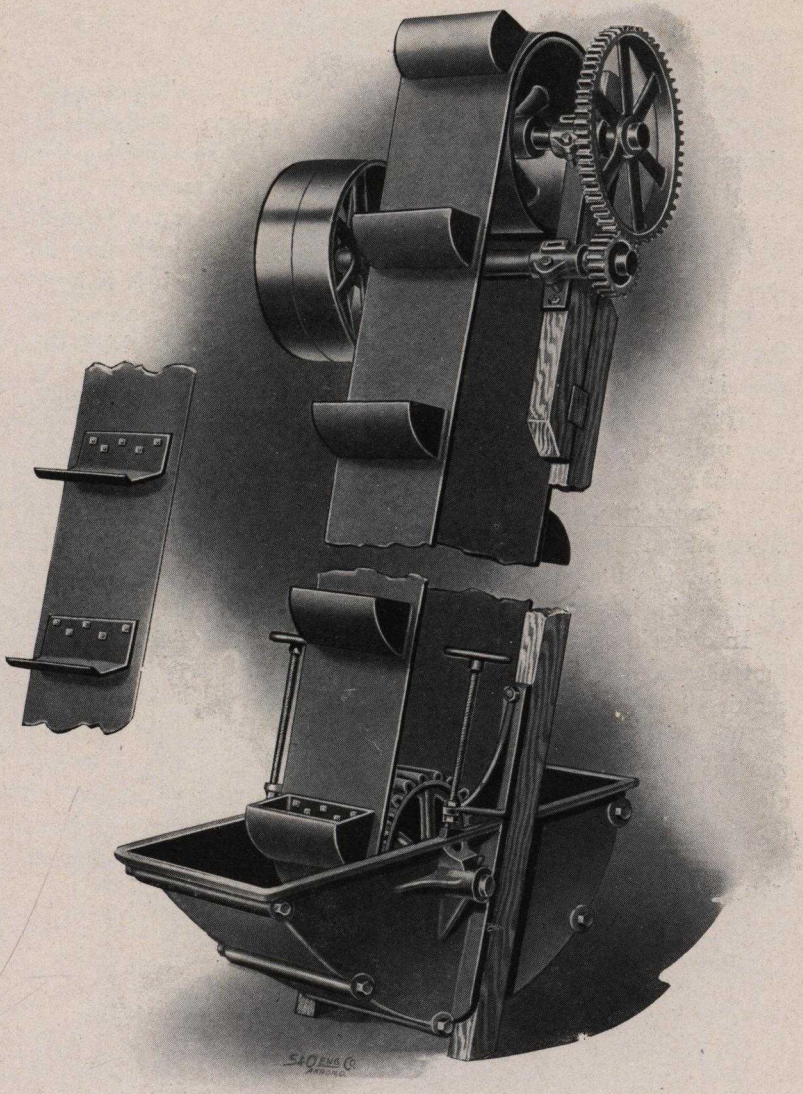
This step is constructed to adjust itself to the alignment of the upright shaft, thus keeping a uniform pressure on the balls at all times The step has dust guard and packing ring to exclude grit, a receptacle for oil that submerges the balls, and proper means for supplying and drawing off the oil.

We believe this to be the best designed and most successful Ball-Bearing Step on the market.

Some manufacturers insist on having this Step, claiming a saving, over other steps, of from five to seven horse power by its use.

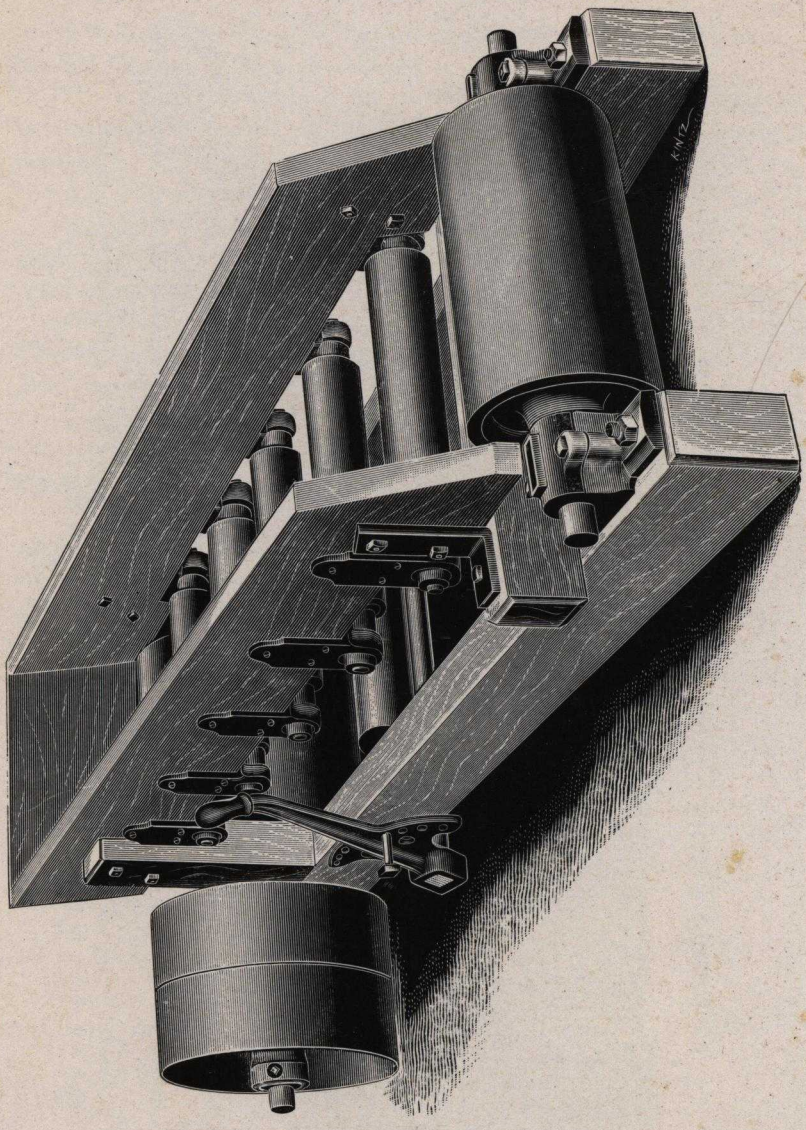
1—Base Plate. 2—Casing. 3—Ball Plates. 4—Packing Ring. 5—Dust Collar. 6—Plug (see assembled cut). 7—Piece of Packing (not shown). 8—Brass Wearing Ring (in Casing, but does not show in cut).

In ordering repairs, please use these names.



Dry and Wet Clay Bucket Elevator

We herewith show our self-contained, dry clay elevator, back-geared and provided with cast iron boot, having lagged pulley on foot shaft. This elevator may stand slightly inclined as shown or may be placed in a vertical position. The buckets are of seamless steel, 2 inches shorter than width of belt, fast-

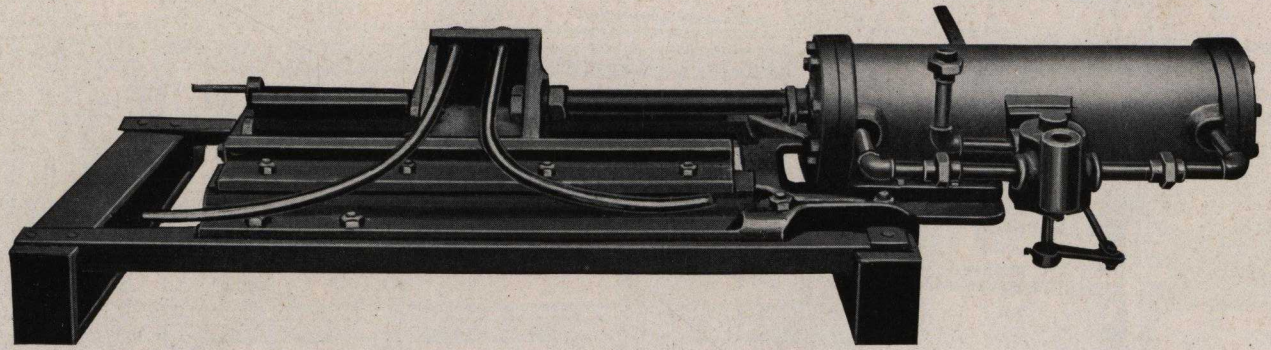


Flying Belt Feeder for Steam Sewer Pipe Press

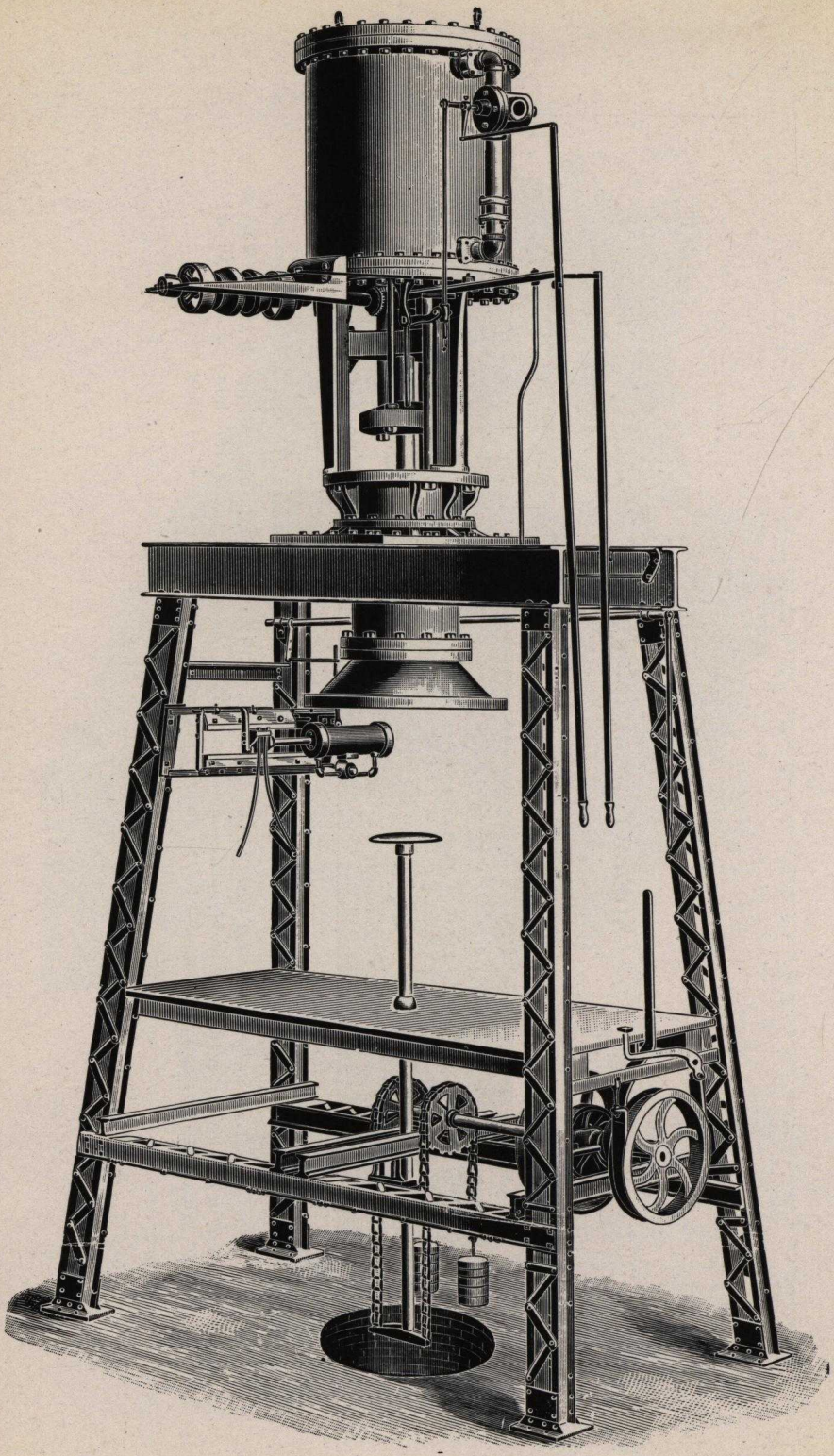
Our flying feeder, above shown, is well-built and self-contained. We furnish with this machine an endless belt, the slack being taken up by tightener, shown on under side, and operated by the lever shown in cut.

This feeder is provided with tight and loose pulleys, 22 inches in diameter, 6-inch face, which should run 240 revolutions per minute. This feeder is used in connection with our storage feeder, shown on page 18, and is very rapid in filling press. The output of any press may be greatly increased by the use of this feeder.

Steam Dummy Engine



To be used for unlocking socket formers on our improved Press when large sizes of pipe are made. This is made in two sizes, 6-inch and 8-inch, and is a quick action device destined to save the labor of one man at press. This Dummy Engine is attached to the steel frame of Pipe Press, as shown on page 24.



40-44-48 and 52-Inch Steam Sewer Pipe Presses

We show our large pipe presses on page 25. They have the same general appearance as the smaller presses previously described; these large presses are made in two sizes: 48-inch by 22 and 24-inch, and 52-inch by 26 inch; the first dimensions given being the size of the steam cylinder, and the other dimensions being the size of the clay cylinders.

The stroke of all our presses is made to suit the work required of them, the standard being 42, 48 and 60 inches respectively for the sizes above mentioned.

This press is also equipped with a steam dummy mounted on legs of frame, all dies requiring its use being furnished with levers of proper length to engage said dummy.

The power disc rod mechanism furnished with this press has been worked up with great care. It is driven by means of our patent band friction clutch and operates smoothly. All operations of the press are in control of the pressman by means of levers placed within his reach, except the cut-off, which is sometimes operated by the greaser.

This power disc rod mechanism gives satisfaction. A 36-inch double strength pipe may be made on this press with as little exertion as a 3-inch pipe on any other press.

This press is also self-contained and like its companion, may be erected independent of the surrounding building. We furnish Lunkenheimer steam lubricators, the necessary balance weights, gauge by which to run pipe proper length, the wrenches used in operating press, and anchor bolts and plates for securing frame to foundation.

All presses should be furnished with our storage and flying feeders, shown on previous pages of this catalogue, to insure a supply of clay for their full capacity.

Capacity.—Our sewer pipe presses are seldom run to their full capacity, owing to the difficulty experienced in getting the pipe away from the press as fast as it is made.

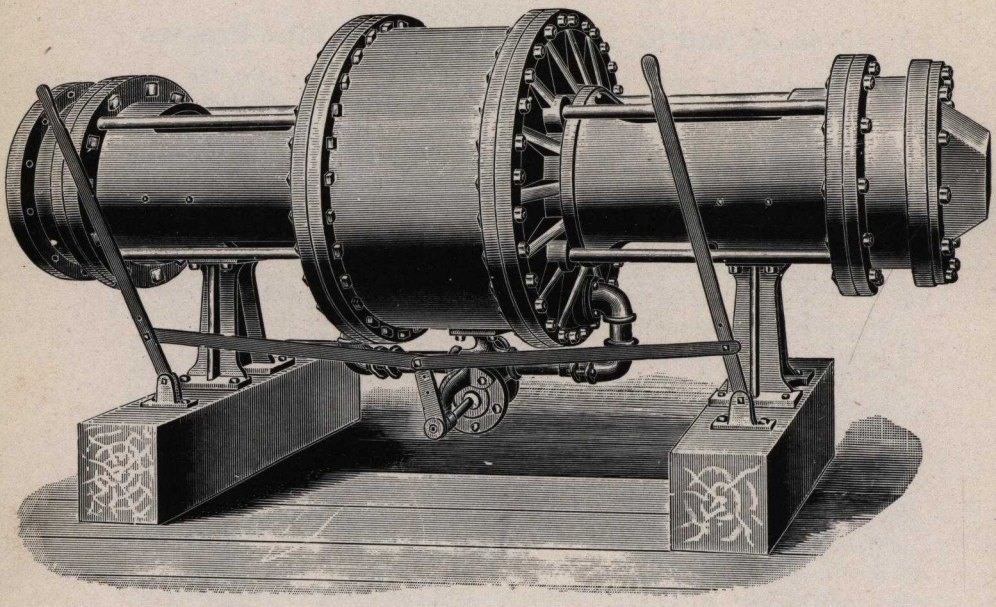
Where special efforts are put forth to keep the pipe away from the press large runs can be made. Some runs of 2-foot lengths of standard socket pipe made in a day of 10 hours on our presses, which we have noted ourselves, are as follows: 6,000 6-inch, 3,518 12-inch, 1,510 18-inch, and 1,100 24-inch.

While these runs are above the average, they are still below the limit of the possibilities of our presses.

Shipping weight of these presses is as follows:

40x18 and 20 ins.	10 tons
44x20 and 22 ins.	13 tons
48x22 and 24 ins.	15 tons
52x26 ins.	18 tons

Boiler capacity required for these presses, from 40 to 60 H. P.



Camp Double-End Steam Press

Our double-end steam press, shown in the accompanying cut, is provided with two clay cylinders, one at each end of steam cylinder, plunging alternately at each end. This machine is strong and powerful and of great capacity.

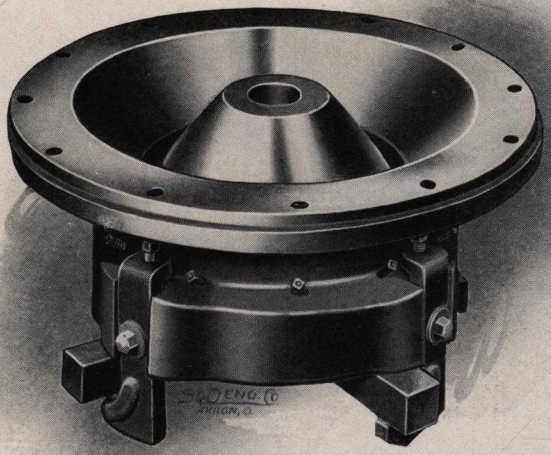
It is built in two sizes, 44-inch steam cylinder with 20-inch clay cylinder; and 40-inch steam cylinder with 18-inch clay cylinder.

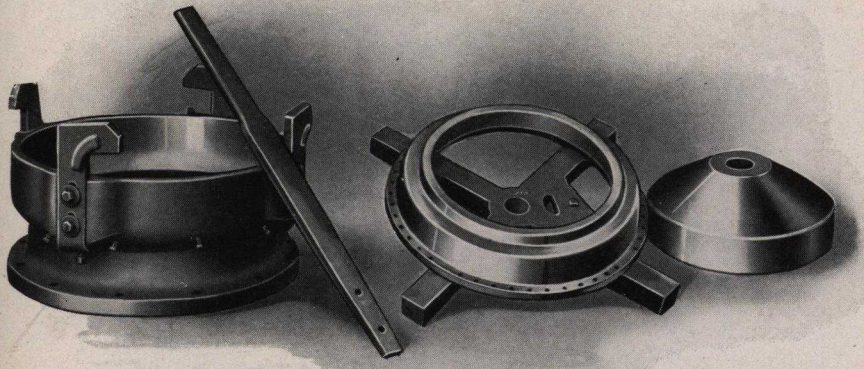
All steam parts of this machine are of the same design as our steam sewer pipe press, which have made that machine deservedly popular.

The capacity of this machine varies with clay and material manufactured, 150 tons being a fair average. The output in many places is greatly increased over these figures, a record for one end, in Jersey clay, being 110 tons in ten hours.

In the conception and perfection of this press, we are very largely indebted to the late Mr. H. B. Camp, of Akron, the veteran clay manufacturer, for whom we have built four of these machines, and whose ideas have been adopted by us in this, the first successful horizontal steam press ever built.

This machine is designed for the extensive manufacture of fire-proofing, terra-cotta lumber, and many other kinds of hollow ware.





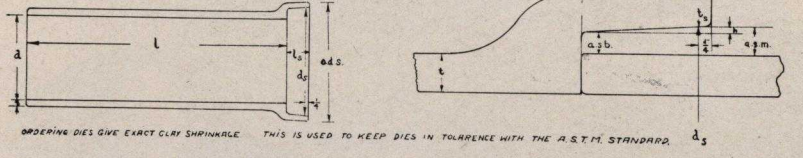
Standard Socket Dies

Our dies are finely finished and run satisfactorily.
We furnish them in all sizes from 3 to 42 inches inclusive.
Our dies have continental reputation for perfection.
We furnish them for all makes of presses.

Standard Sewer Pipe

Caliber	Thickness	Weight per Foot	Depth of Socket	Annular Space
2 inches	3/8 inches	5 pounds	1½ inches	¼ inches
3 inches	½ inches	8 pounds	1½ inches	¼ inches
4 inches	½ inches	10 pounds	1⅝ inches	⅜ inches
5 inches	⅝ inches	12 pounds	1¾ inches	⅜ inches
6 inches	⅝ inches	15 pounds	1⅞ inches	⅜ inches
8 inches	¾ inches	24 pounds	2 inches	⅜ inches
9 inches	13/16 inches	28 pounds	2 inches	⅜ inches
10 inches	⅞ inches	35 pounds	2⅛ inches	⅜ inches
12 inches	1 inches	45 pounds	2¼ inches	½ inches
15 inches	1⅛ inches	65 pounds	2½ inches	½ inches
18 inches	1¼ inches	85 pounds	2¾ inches	½ inches
20 inches	1⅜ inches	110 pounds	3 inches	½ inches
21 inches	1½ inches	128 pounds	3 inches	½ inches
22 inches	1⅝ inches	141 pounds	3 inches	½ inches
24 inches	1¾ inches	145 pounds	3¼ inches	½ inches
27 inches	2 inches	224 pounds	4 inches	¾ inches
30 inches	2⅛ inches	252 pounds	4 inches	¾ inches
33 inches	2¼ inches	310 pounds	5 inches	1¼ inches
36 inches	2½ inches	350 pounds	5 inches	1¼ inches

Drain tile are made thinner than sewer pipe.

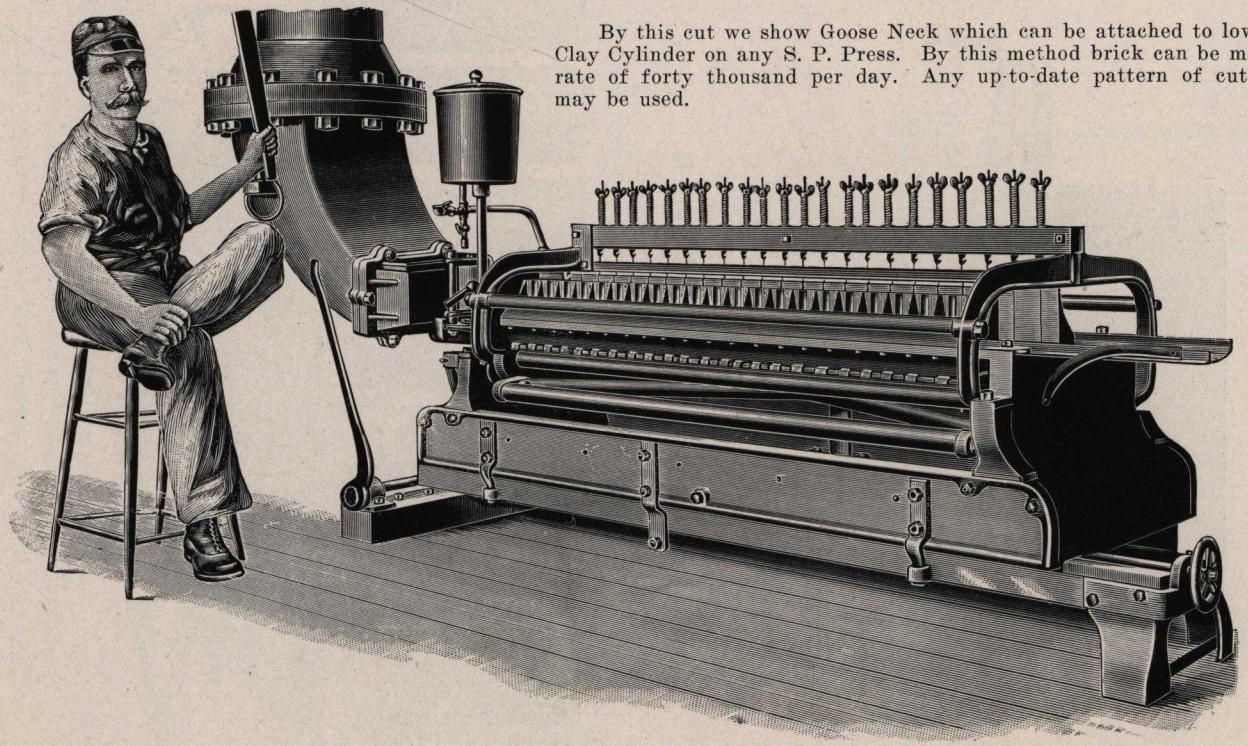


ORDERING DIES GIVE EXACT CLAY SHRINKAGE THIS IS USED TO KEEP DIES IN TOLARENCE WITH THE A.S.T.M. STANDARD.

Comparison of Dimensions of Sewer Pipe by the A.S.T.M. and at the Factory of [redacted]

d diam.	l-length		d_s = inside diameter socket		l_s - length of socket		h = taper of socket, one inch in 24 inches		t - thickness of barrel of pipe		t_s = thickness of socket at front edge		a.s.b. = annular space at base of socket		a.s.m. = annular space at mouth of socket		o.d.s. = outside diam. of socket	
	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory	A.S.T.M.	Factory
6	2'		8⅛		2"		3/32		5/8		15/32		3/8		¼		8 3/4	
8	2-2½-3		10¾		2¼		1/8		3/4		9/16		½		5/16		11 3/4	
10	2-2½-3		13		2½		1/8		7/8		2 1/32		½		3/8		14 3/4	
12	2-2½-3		15¼		2¼		1/8		1		3/4		½		3/8		16 3/4	
15	2-2½-3		18¾		2¾		1/8		1¼		15/16		½		3/8		20 3/4	
18	2-2½-3		22¼		3		3/32		1½		1⅛		½		⅜		24 3/4	
21	2-2½-3		26		3		3/32		1¾		1 5/16		15/32		3/4		28 3/4	
24	2-2½-3		29½		3		3/32		2		1½		5/8		3/4		32 3/4	
27	3		33¾		3½		3/16		2¼		1 11/16		11/16		7/8		35 3/4	
30	3		37		3½		3/16		2½		1⅞		11/16		1		39 3/4	
33	3		40¼		4		3/16		2 3/4		1 13/16		13/16		1		44 3/4	
36	3		44		4		3/16		2¾		2 1/16		1 1/16		1 1/8		48 3/4	
39	3		47¼		4		3/16		2 9/16		2 5/16		1 1/16		1 1/8		51 3/4	
42	3		51		4'		3/16		3		2 1/4		1 5/16		1 1/2		55 3/4	

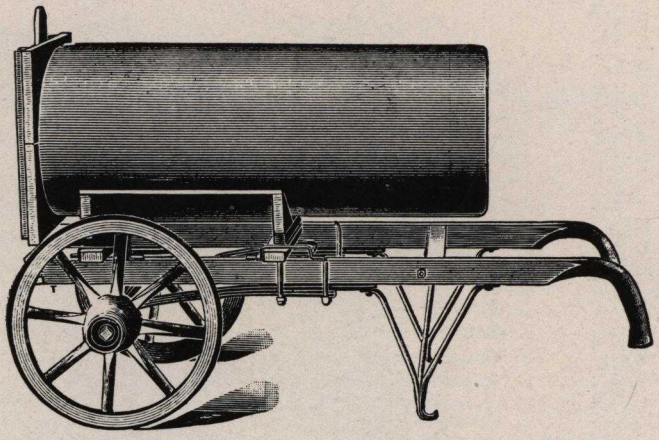
Goose Neck to Attach Brick Die to Sewer Pipe Press



By this cut we show Goose Neck which can be attached to lower end of Clay Cylinder on any S. P. Press. By this method brick can be made at the rate of forty thousand per day. Any up-to-date pattern of cutting table may be used.

One-Pronged Saddle Truck

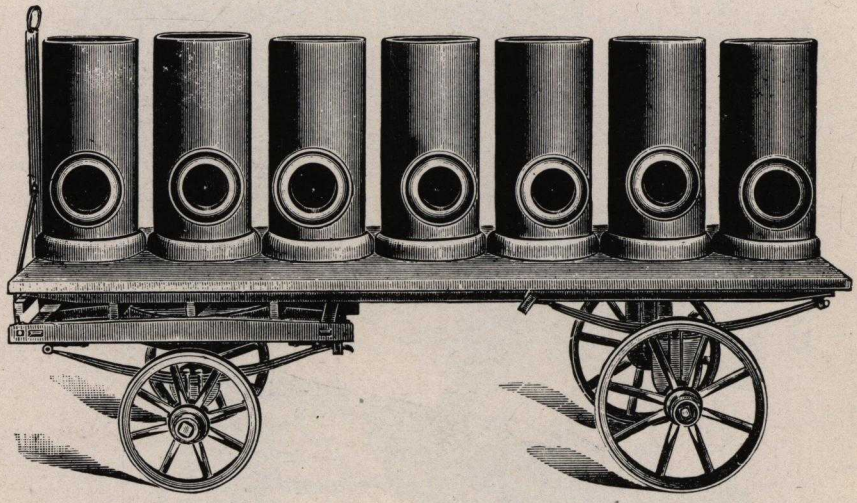
On Springs



Used for trucking large pipe from drying floor to kiln.

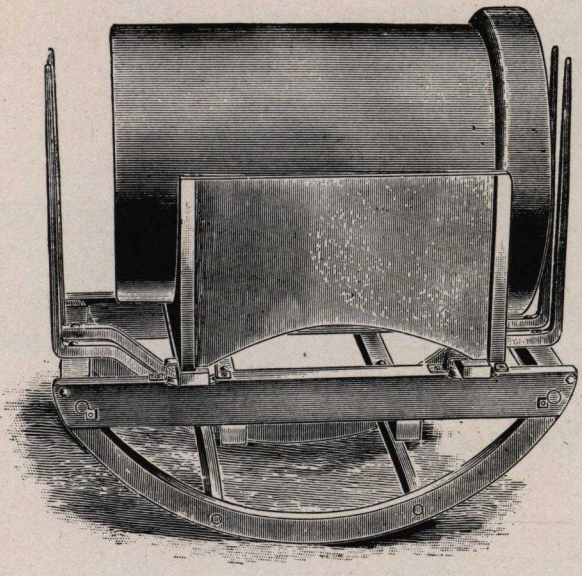
Four-Wheel Hand Truck

On Springs



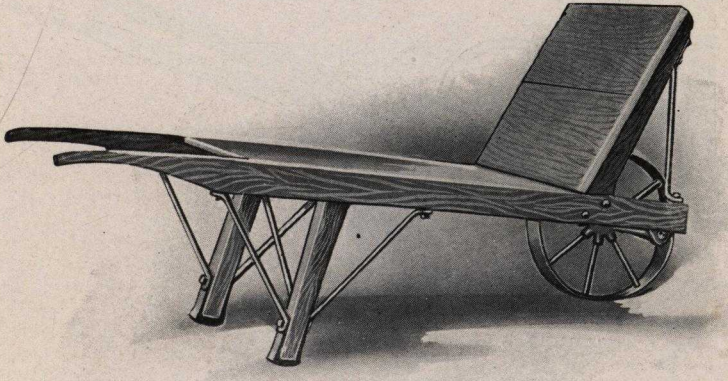
Used for hauling small pipe from press or elevator to any part of drying floor, and from drying floor to kilns.

This truck is indispensable in a well-equipped shop.

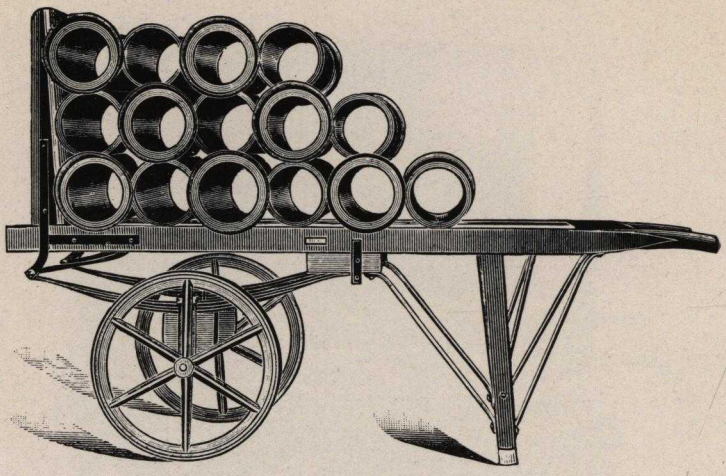


Rocker with Prongs and Adjustable Tops

For turning all sized pipe from 12-inch up at press and on drying floor. Made to turn all lengths. State length and outside diameter of pipe when ordering. Three different sized tops can be used to advantage with each rocker. This rocker is a unique machine, and the best in the market.



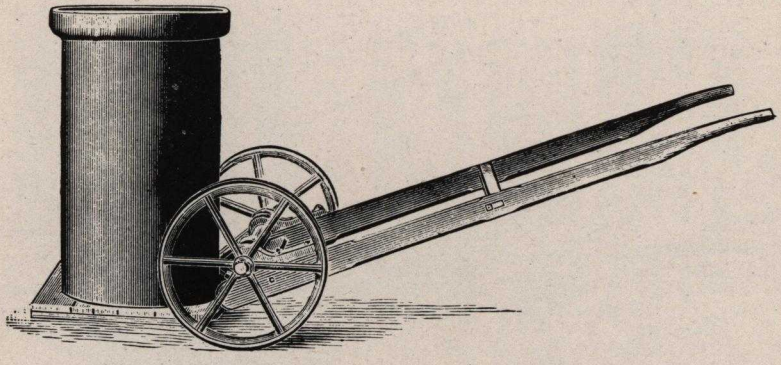
Pipe Wheel Barrow



Two-Wheel Herdic

On Springs

To carry pipe to and from kiln and for general purposes. This is a most excellent, convenient and important rig for small pipe.



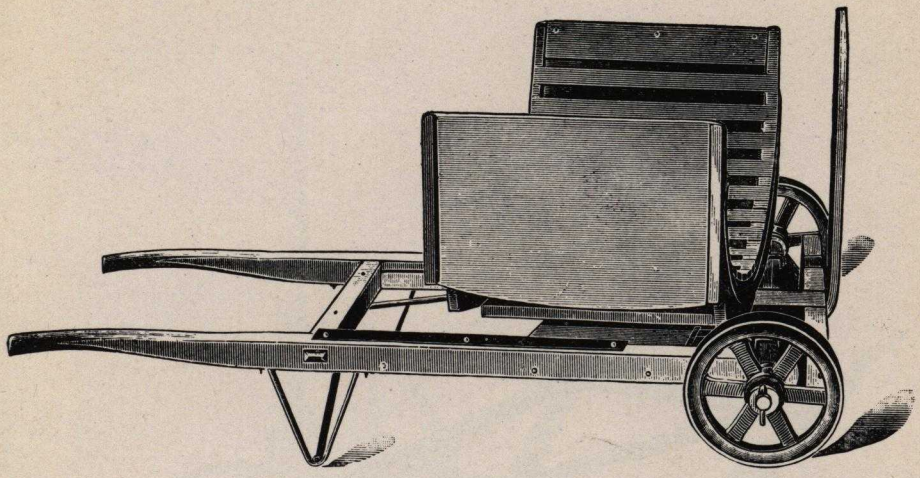
Low-Down Truck

With Loose Adjustable Prongs

Used for trucking pipe from press to drying floor, and from drying floor to kiln.

Made in two sizes.

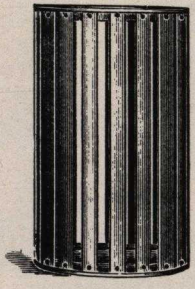
Small one for pipe up to 18-inch and large one for 20-inch to 24-inch.



The Viall Truck

One-Pronged

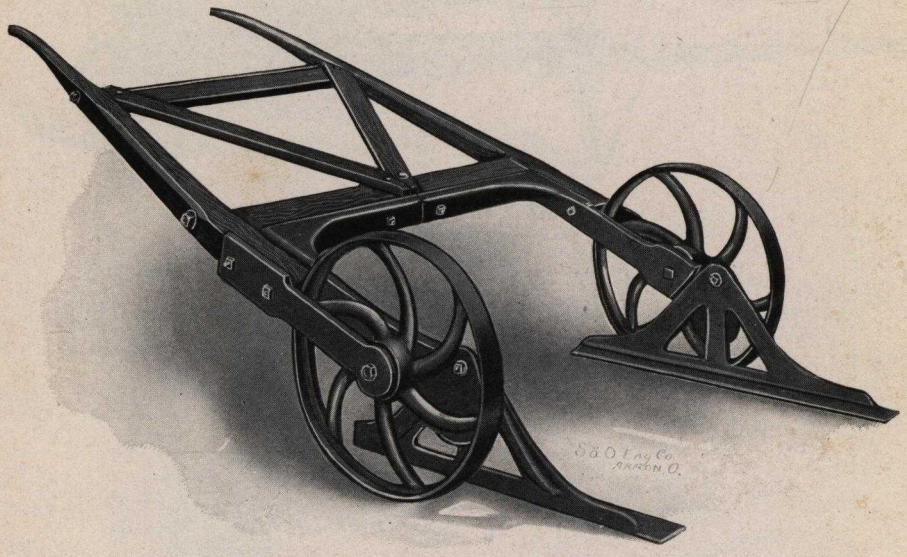
Used at press for turning pipe 12 inches to 30 inches in diameter. Is perfect in operation and saves service of at least one man at press.



Drum

Used to prevent collapse of large green pipe when turned at press. Made in any size required.

We also make socket or chuck boards to order.



Side Left Truck

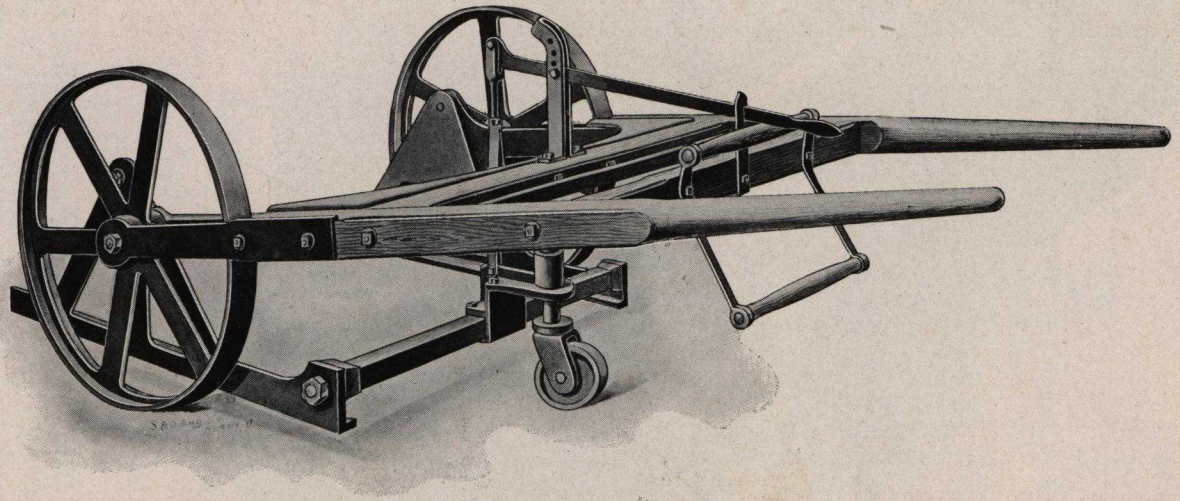
This truck runs easily with pipe as large as 24 inches.

The weight is carried nearly over the center of wheels so that there is little strain on the man trucking pipe with it.

In ordering, give width of bat board.

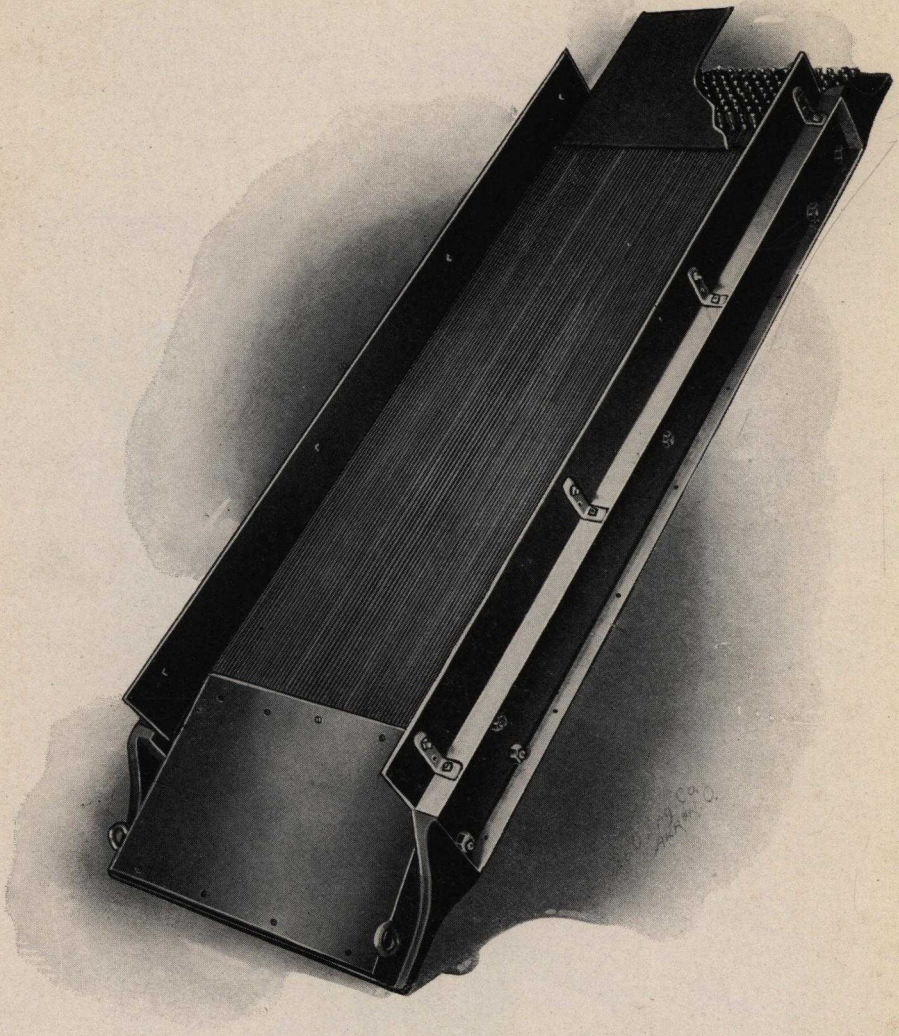
The truck is made in three sizes for 15 to 24-inch pipe and intermediate sizes.

Weston Pipe Truck



For Pipe Above 24-Inch

The "only" way to handle large pipe. You can handle 36-inch pipe as easily with this truck as 15-inch can be handled by any other truck made. In ordering trucks give us the width of boards.



Piano Wire Screen

Our Piano Wire Screen here shown, is a modern invention and is of great value in screening clay for sewer pipe, fire brick, fire-proofing and other clay products. The clay as it comes from the elevator falls on the steel apron at upper end of screen, thus giving to the wires a constant vibration. The above cut shows half of the apron removed in order to show

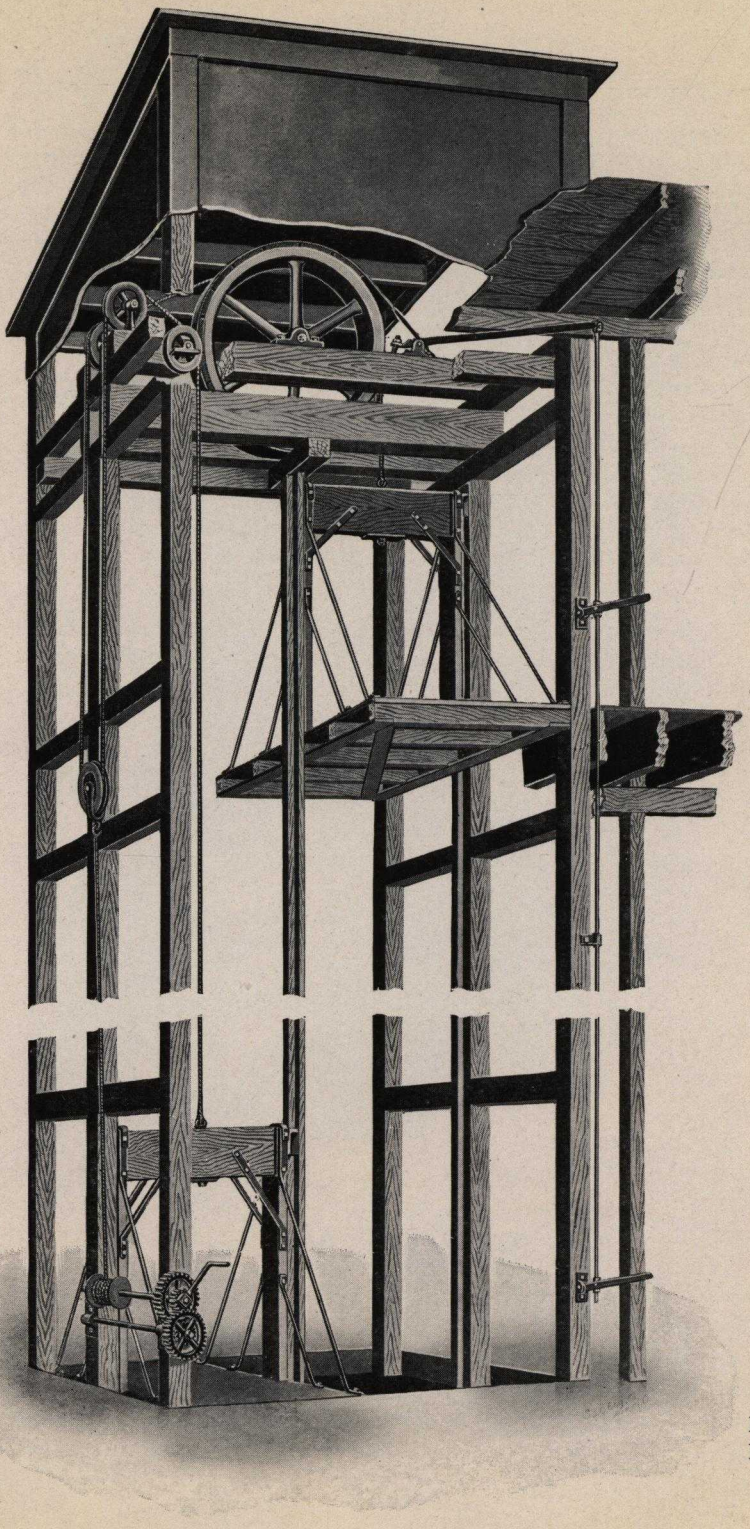
the keys for tightening the wires—each wire is tightened independently. The fine clay presses through the screen readily while the coarser particles run over the top and return to the mill to be reground. This screen is displacing screens of ordinary make, its value having been demonstrated and established.

We make but one size which is 30 inches by 7 feet, the wires being spaced according to the fineness of clay required, usually 1-9 in. or 1-10 in. centers. The space through which the clay falls therefore, is just the thickness of the wire less than the dimensions above given.

One screen of this pattern will take care of all the clay that one 9-foot dry pan grinds. This screen should be hung at an angle of 45 degrees, and needs no jarring or shaking for successful operation. It is of special advantage for sticky clay, and requires the minimum of attention.

Shipping weight, 1,800 pounds.

We also furnish gravity screens made of perforated plates. In ordering screens, state the nature of your clay and fineness required.


Top Floor
Intervening Floors not Shown
Bottom Floor

Gravity Elevator

We make three types of gravity elevators, known as the Double Balanced Cage Gravity Elevator with derrick adjusting apparatus, designed for three or more floors; a Double Balanced Cage Gravity Elevator, not furnished with derrick adjusting apparatus, designed for two floors only; and a single Cage Weighted Gravity Elevator, designed for two or more floors.

The elevator here shown is an invention of our own and is the only one on the market in which the cage may be easily adjusted from one floor to the other, it being required of all double gravity elevators that one cage be even with the floor from which ware is being taken while the other cage is at the bottom of shaft. Since this cut was made, we have considerably improved this elevator, the operation being the same, except somewhat simplified.

These elevators are furnished with brake bands and winding drums, substantially built, and operated by levers located on each floor of the building except the first. The brake is set at all times and holds the cage securely in position until the brake is released by the operator.

Two thousand pounds may be run onto either cage without swerving it from its position, until brake is released by operator.

We build several sizes of these elevators to suit the requirements of the trade.

For sewer pipe shops we build the cages about 5 x 9 feet, large enough to take on our four-wheel hand truck, shown on page 27.

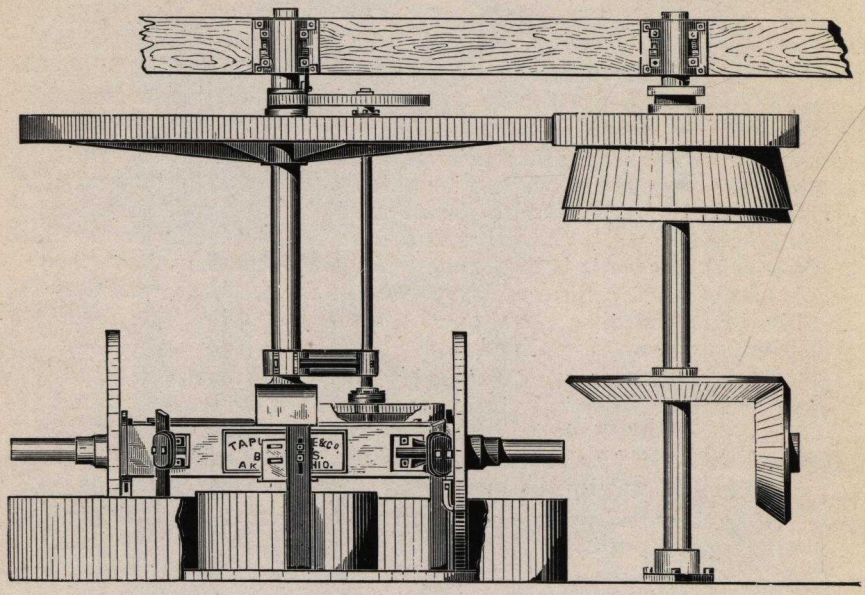
We furnish this elevator complete and at the same time provide you a blue print plan by which to construct elevator shaft in building to receive elevator.

This elevator has made friends among the trade, and we can cite you many that are in use, one company alone, The McRoy Clay Works, of Brazil, Ind., having six in operation at the present time.

The derrick adjusting apparatus, shown at side of elevator, does away with the irksome task of adjusting the cages by taking out short lengths of sprocket chains or cables as used by other makes.

Our elevator is provided with a continuous cable whose fastenings do not need to be disturbed, the adjusting being accomplished by our derrick adjusting apparatus in the manner shown.

Gravity elevators are a requisite in thoroughly *up-to-date sewer pipe plants.* They afford the *cheapest, quickest* and *best means* of getting ware from the floors to the kiln.

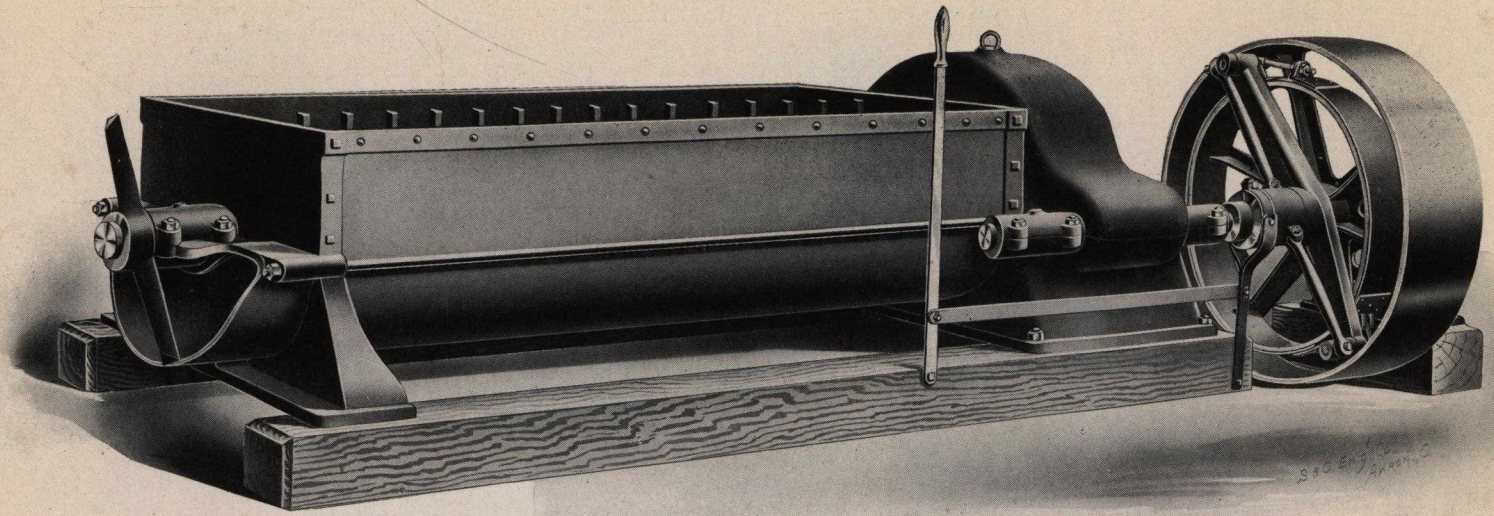


Chaser Mill

Above we present cut of Chaser Mill for grinding and tempering clay, same being specially adapted to potters' service where speed is not of such vital importance as quality of material. For even and uniform quality, the work of this machine has never been equaled in any machine of different character. This mill, of which we make two sizes, combining all the desirable features, is strong, substantial and well-built, to insure durability and economy.

An endless rack and pinion cause the grinding wheels to traverse the face of bed plate from center to outside of curb; thus, the bed being stationary and the clay not affected by centrifugal motion, it is thoroughly ground and tempered; a very important feature when it is to be used, as is often the case, in hand turning, where unevenness and stones are a serious menace to operators in handling the clay.

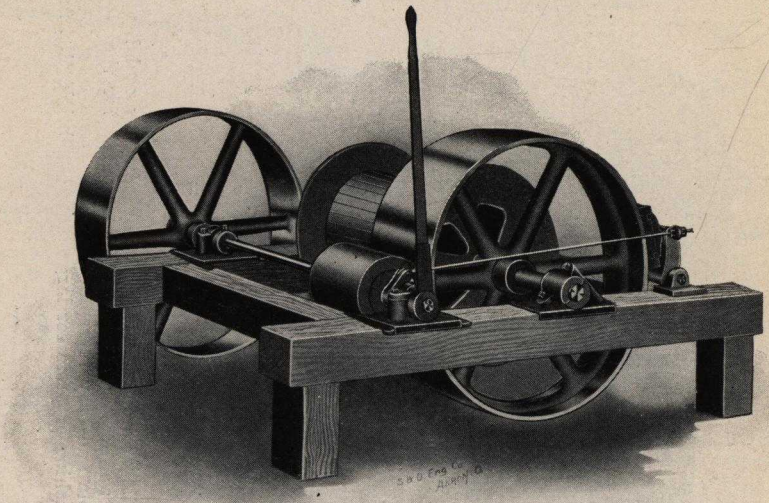
This mill is a veteran in the field, but is still in demand—hardly a year goes by that we do not build several of these machines. It does thorough and satisfactory work.



10 Foot Tempering Pug Mill

Our 10-foot Pug Mill here shown is built of iron and steel for severe duty and large capacity. It is driven by our Patent Band Friction Clutch and Cast Gears, of ample strength for the work. It is a high-grade machine. Wearing parts are renewable and easy to replace.

This mill will temper clay for auger machine or press for large output of brick, tile, fire-proofing, hollow blocks, etc.



Haulage Machine

The winding drum here shown is a simple and effective device for drawing clay into the building.

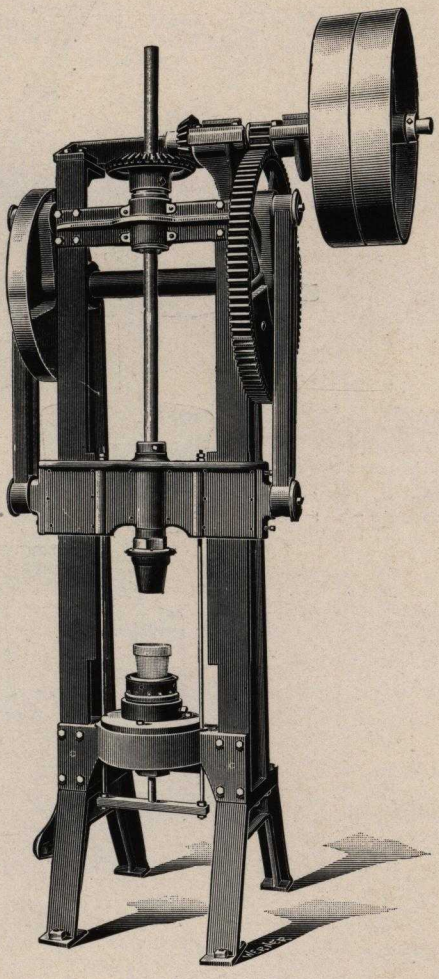
It is capable of pulling a 2½-ton car of clay up an incline of at least 30 degrees, 600 feet per minute.

The machine is simple and durable and easy to operate.

We furnish this same machine with cast iron drum and frame at a slightly increased cost.

Flower Pot Machine

By the accompanying cut we present our latest machine for the manufacture of flower pots. It is absolutely automatic, with the exception of placing the clay in the mold, and removing the finished pot.



Operation

The inside former revolves by reason of the bevel gears, and also has a reciprocating motion up and downward, this motion being taken from the spur pinion and delivered by means of large gear to cranks on each side to which are attached connecting rods transmitting motion to cross-head which carries inside former.

The lower part of stationary mold carries a lifting rod (the top of which is nearly full size of pot), which lifts the pot, to be removed by the operator.

The lower mold is held in lower cross bar, and is adjustable to suit size and height of pot.

All parts being automatic, the product of this machine is not dependent upon human force, as in other machines, and as many pots can be made in the ninth hour of the day as in the first.

Frame

The frame is cast perfectly rigid; all bearings babbitted with best babbitt.

The machine is of superior construction, and is strong, massive and substantial. We recommend it for continuous and severe duty.

This machine has made 10,000 1¾-inch pots, or 8,000 6-inch pots in 10 hours.

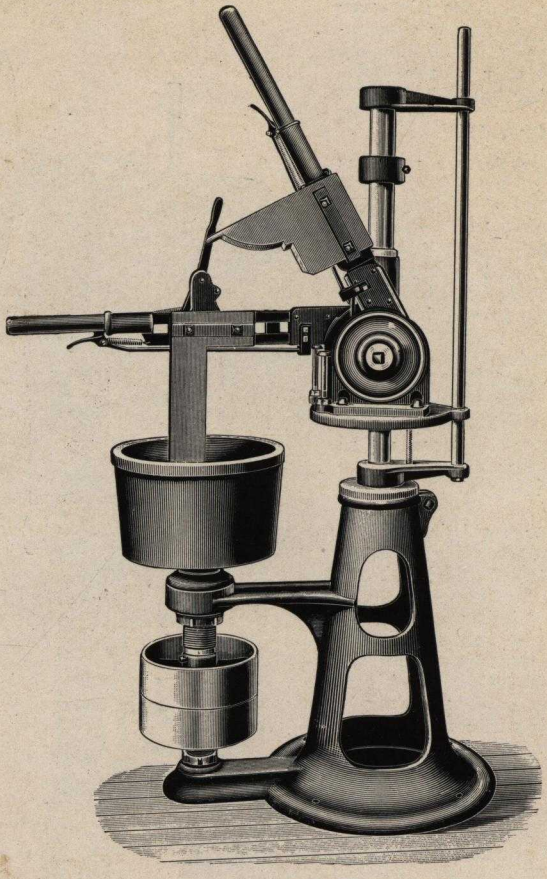
Speed of plunger, 19 strokes per minute.

Height of machine, 11 feet.

Drive pulleys, 28x5-inch; speed, 190 R. P. M.

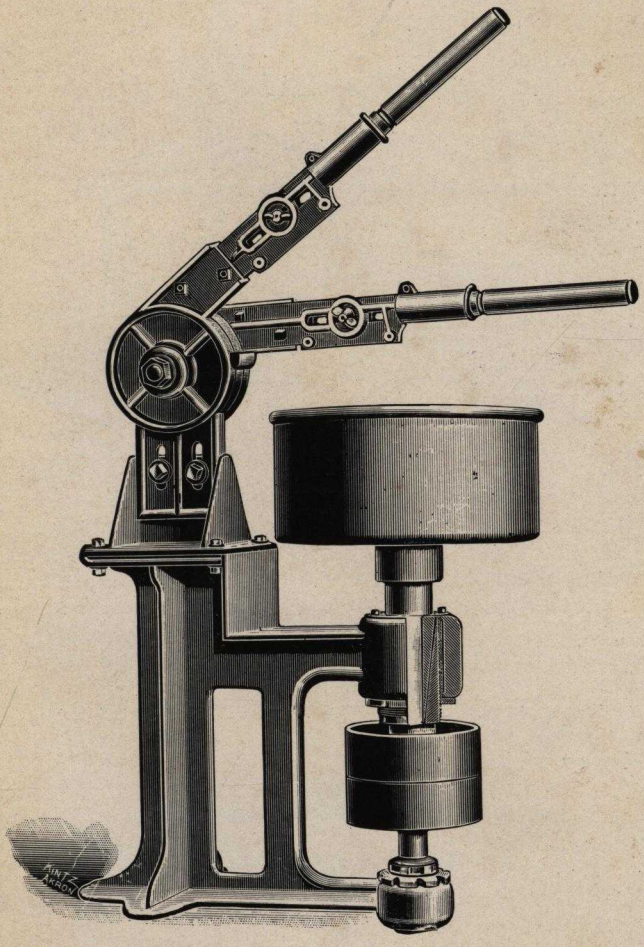
Shipping weight, 3,300 pounds.

We make a back-geared machine, this same design, but considerably stronger, for making paint pots, furnace nozzles and extra large flower pots. This back-geared machine has same size drive pulleys, speed 275 R. P. M.

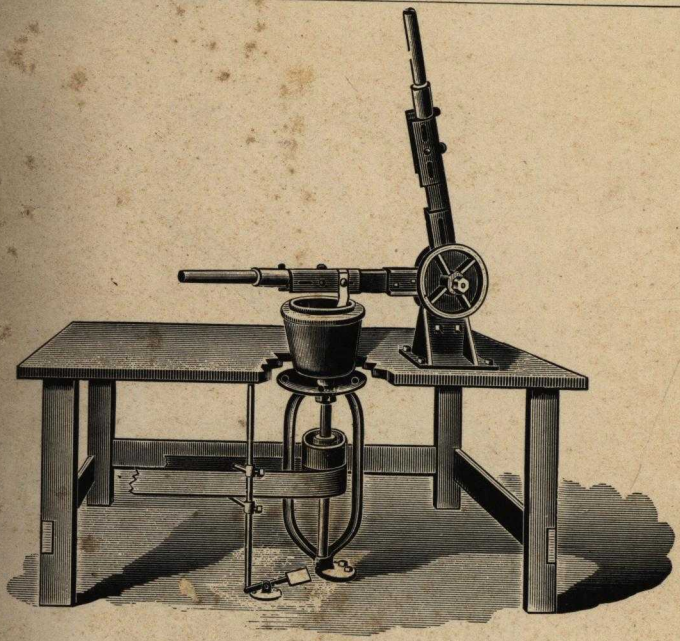


Jolly

This machine is designed for making churns and other deep ware. The pull down is balanced with counter weights and may be raised and lowered at will. This jolly is also suited for general stoneware work.



Heavy Jolly with Double Pull-Down



Jolly

The above machine is designed for a moderate-priced Jolly, and is strong and substantial. The essential features of a Jolly are shaft and bearing, and these points in this machine have received special attention. The shaft is of steel and very large; bearings are of phosphor bronze, tapered and adjustable.

Any sized head below 16-inch can be furnished with this machine.

Jolly can be furnished with either single or double pull-down.

With or without table.

Kick Wheel

PIONEER MANUFR'S.
TRADE
T.R.C.Co.
MARK
CLAY MACHINERY
ESTABLISHED-1862.
TAPLIN-RICE-CLERKIN Co.
AKRON, OHIO-U.S.A.